

## ABSTRACT OF THE DISCLOSURE

An electric synchronous machine with improved torque characteristic has a stator and a rotor, wherein the stator includes a winding, preferably a three-phase AC winding, with an average coil width  $\tau_{sp}$ . The rotor is provided with permanent magnets and has a pole pair number of  $2p$  with a pole pitch width  $\tau_p$ , wherein the pitch ratio  $\tau_{sp}/\tau_p$  is  $\geq 2.5$ .